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        S1
                1764
                         455/63.4,575.7,562.1,25.ccls.
BRS
        S2
                1313
                         S1 and (increas$3 elevat$3 near4 (side$lobe))
BRS
        S3
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(side$lobe)
                6
                         (increas$3 elevat$3) near4 (power strength) near4
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        S4
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BRS
        S5
                39
                         (increas$3 elevat$3) with (power strength) with
(side$lobe)
                1764
                         455/63.4,575.7,562.1,25.ccls.
BRS
        S6
                         S6 and S5
BRS
        S7
                4
BRS
        S8
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                4
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BRS
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                         S6 and S10
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BRS
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BRS
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                         455/63.4.ccls. and covariance
BRS
        S14
                11
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BRS
                         (smart adj2 antenna$1) same (side$lobe$1) same Butler
BRS
        S15
                0
                         (smart adj2 antenna$1) same (side$lobe$1) same1
                41927
BRS
        S16
Butler
                11
                         (smart adj2 antenna$1) same (side$lobe$1)
BRS
        S17
                41927
                         ((smart adj2 antenna$1) same (side$lobe$1)) same1
BRS
        S18
Butler
                         ((smart adj2 antenna$1) same (side$lobe$1)) and
BRS
        S19
                2
Butler
                         ((smart adj2 antenna$1) same (side$lobe$1)) and
                 2
BRS
        S20
Butler
                         ("20020181492").PN.
        S21
                1
IS&R
        S22
                 1
                         null$widening
BRS
                         S6 and (null near2 (increas$3 wid$5 expand$3 chang$3
BRS
        S23
                 18
adjust$3))
                 2378
                         (smart adaptive) adj2 antenna$1
BRS
        S24
                         S24 same (side$lobe$1)
        S25
                 57
BRS
        S26
                 5
                         S25 and (butler) and null
BRS
                 997
                         (smart ) adj2 antenna$1
BRS
        S27
                         smart adj2 antenna$1
                 997
        S28
BRS
        S29
                 138
                         (smart adj2 antenna$1) near2 adaptive
BRS
                         (("6393303") or ("6735445") or ("20020181492")).PN.
                 3
        S30
IS&R
                         ("6735445").PN.
        S31
                 1
IS&R
                0 .
                         S31 and ((smart adj2 antenna$1) and (side$lobe$1))
BRS
        S32
and Butler
                         S31 and (smart adj2 antenna$1)
BRS
        S33
                 1
                         ("6393303").PN.
        S34
                 1
IS&R
                         S34 and (smart adj2 antenna$1)
        S35
                 Ω
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        S36
                 0
                         S34 and (adaptive adj2 antenna$1)
BRS
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IS&R
        S37
                 1
                         S31 and (smart adj2 antenna$1) and power
        S38
                 1
BRS
                         S34 and power
        S39
                 1
BRS
        S40
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                         S34 and power and side$lobe
BRS
        S41
                 0
                         $34 and power and side$lobes
BRS
BRS
        S42
                 16
                         "smart antenna" near2 sdma
                         $34 and "base station"
                 1
BRS
        S43
                         S34 and butler
                 1
        S44
BRS
        S45
                 1
                         S34 and butler
BRS
        S46
                 0
                         S31 and butler
BRS
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BRS
        S47
                 116
                         S47 same ((increas$3 modif$4 chang$3 adjust$3) near4
        S48
               + 0
BRS
weight)
                 0
                         S47 same ("weight matrix")
        S49
BRS
BRS
        S50
                 1
                         S47 and ("weight matrix")
BRS
         S51
                 4227
                          ("weight matrix")
                          ("weight matrix") same side$lobe
BRS
         S52
                 0
                         "weight matrix" same side$lobe
                 0
BRS
         S53
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        S54
                16
IS&R
        S55
                         ("6393303").PN.
                1
                        S55 and "weight"
BRS
        S56
                0
BRS
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                        "weight matrix" near2 "W="
                         ("20040235529").PN.
IS&R
        S58
                1
                         "20040235529".pn. and "weight matrix"
        S59
BRS
                1
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                        "20040235529".pn. and "Downlink Beamforming Matrix"
BRS
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                2
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                2
                        "Weight Matrix" near6 (expand$3 modif$4 increas$3)
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                         "Weight Matrix" near6 (expand$3 modif$4 increas$3
BRS
        S64
                2
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                         "Weight Matrix" with (expand$3 modif$4 increas$3
BRS
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                300
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                         "Weight Matrix" with (expand$3 modif$4 increas$3
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                         "Weight" with (expand$3 modif$4 increas$3 adjust$3
                28080
BRS
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bigger) with size
                         (Weight adj2 Matrix) with (expand$3 modif$4 increas$3
        S69
                35
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                0
                         "Butler matrix" near4 weight same side$lobe
BRS
                         dummy near4 side$lobe$1
                4
BRS
        S71
                        "Weight Matrix" with (chang$3 expand$3 modif$4
        S72
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BRS
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                         "Weight Matrix" near2 is
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                         455/63.4,575.7,562.1,25.ccls.
        S74
BRS
                         S74 and (weight with (chang$3 expand$3 modif$4
        S75
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BRS
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                         (increas$3 elevat$3) with (power strength) with
        S77
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BRS
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                         side$lobe$1 same weight
BRS
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BRS
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IS&R
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                1
                         S80 and "Weight Matrix"
BRS
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                0
                         455/562.ccls.
BRS
                         (increas$3 rais$3 elevat$3) near4 side$lobe$1
                601
BRS
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                         (increas$3 rais$3 elevat$3) near4 side$lobe$1 near4
                22
        S84
BRS
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                7
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        S85
BRS
power
                         "6542519".pn. and "null widening"
                0
BRS
        S86
                         "6542519".pn. and "null"
        S87
BRS
                O
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        S88
BRS
                1
                         "zero forcing" same beamforming
        S89
BRS
                7
        S90
                         maximum near2 SINR near2 beamformer
BRS
                1
                         (maximum near2 SINR) with beamformer
BRS
        S91
                1
                         (maximum near2 SINR) same beamformer
BRS
        S92
```